REAL ESTATE

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OUTLOOK

A Monthly Forecast for the Economy and Real Estate

FORECAST SUMMARY

- On the basis of preliminary data, the Commerce Department reported that the annual rate of real GNP growth during the third quarter reached 2.5 percent, the same rate of advance recorded in the second quarter, and generally in line with expectations.
- The consumer price index rose by a slight 0.2 percent in September, after staying unchanged in August. For the first three quarters, the CPI has risen at a 4.4% annual rate.
- The 30-year government bond rate is expected to fall to 7.9% by the end of 1989, and average 7.6% in 1990. Mortgage interest rates are expected to hover around 9.75% through the end of 1989, before sliding lower in early 1990.
- Housing starts activity was dealt a setback in September, as total starts fell to an annual rate of 1.263 million units, 5.2 percent below the August rate of 1.332 million units, and 13.7 percent behind the September 1988 pace. Single-family starts retreated to an annual rate of 971 thousand units, 2.1 percent below the August rate of 992 thousand units, and 6.5 percent slower than the September 1988 annual rate of 1.039 million units.
- After two months of relatively strong activity, September sales of new single-family homes fell to an annual rate of 618 thousand units, down 14.0 percent from the August rate of 719 thousand units; and 10.6 percent below the September 1988 annual rate of 691 thousand units.
- Sales of existing single-family homes rose strongly in September to an annual rate of 3.63 million units, an increase of 4.3 percent from the revised August annual rate of 3.48 million units; and virtually unchanged from the September 1988 annual rate of 3.65 million units.

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BACK TO THE FUTURE
Economic Commentary

by
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Real Estate Finance

"We are borrowing prosperity from the future"
"Whether the rate of growth in consumer debt will slow down is no longer the question;...it must slow down"

Sound familiar? These are refrains that are heard throughout the land on virtually a daily basis. Mounting debt--public and private government and consumer--has become a central fact of economic life. Yet, the statements entered above come from an analysis written in 1955, not 1989. We're citing them not to dismiss debt concerns as a problem, which we always have with us. Rather, it's to indicate that many of the origins of the debt of the Eighties--and more importantly, debt growth in the Nineties--are the same as those which generated worry in the Fifties.

In the decade and a half after World War II, the United States changed dramatically. The war had emptied rural America and swollen cities; the postwar population burst created suburban rings. And with the suburbs came investment in houses, roads, schools and hospitals. That rebuilding of an entire nation was accomplished by "nesting" households, those with heads between 25 and 44 years of age, whose time of life led them to create families, buy houses, cars and furniture, and fill up the maternity wards of the new hospital and classrooms of the new schools with their offspring. In doing this, they incurred debt in amounts unprecedented in U.S. history. In retrospect, I don't think we would view that accumulation as a negative behavior that should have been avoided at all costs. Rather, we view it as a process that built a strong economic machine.

Now we talk endlessly about the baby boom generation. (Q: In the year 2010 will we be watching a bunch of obnoxious retirees on "sixtysomething"?).

Yet, the proportion of American households headed by 25-44 year olds in 1985--43 percent--is unchanged from the figure for 1950. And while history may not be a circle, it certainly is a spiral, and we are seeing, from a consumer debt standpoint, a duplication of the Fifties.

Wait a minute! How can we possibly compare these live-for-the-moment Yuppies to the good solid family builders of thirty-five years ago? Because things change, and the current "nesting" generation is going through the same process in a different world. We see, in our mind's eye, a suburbia fixed in the Fifties--June Cleaver in her Levitt house kitchen, waiting for the boys to come home from school and Ward to catch the 5:08 from the city. Well, June is out working and neither she nor Ward will catch that train--or even the 6:08. And the boys are programmed and scheduled from school to computer lab to soccer practice.

It's a human tendency for ideas and conceptions to solidify early in adulthood. For most of us, the suburbs are as they were in the Fifties and Sixties. But now expectations are higher, life is busier and stress is more of a fact of life for most of the middle class. And the consumption and debt patterns of this generation recognize that, focussing as they do on convenience (two cars, restaurant meals) and substitution services (day care, lawn and garden maintenance) and time saving gratification (state-of-the-art electronics).

The debt run-up by the baby boomers represents the pursuit of the same ends as their parents, but in a far more complex world. Like their forbearers, the present generation will pay off these debts. We expect that consumer debt as a percent of income will peak early in the coming decade and decline dramatically through the turn of the century. This suggests a decline in interest rates that will dominate the Nineties.

If the private portion of our debt is understandable, the public portion carries lingering uncertainties. The great bulk of the investment we made in the Fifties needs renewal. The renewal of our public infrastructure--roads, bridges, tunnels, sewers--looms as one of the major challenges of the Nineties. Moreover, we face an opportunity this decade to renew our productive capital (both physical and human) and leapfrog our European and Asian competitors. In fact, population dynamics in the form of a shrinking labor pool suggest that this opportunity may become a necessity. Clearly, the Nineties must be a decade of public investment on a scale comparable to the Fifties.

Some of this can be accomplished within current budgetary limits. Clearly, Federal spending is in part wasteful and can be trimmed back; the survival of Mr. Gorbachev may give us the opening we need to redirect military spending to other uses. But if we are to renew our public physical capital, make the public investments we need in education and health, and allow private firms to adopt up-to-date production methods, we need to generate resources from either voluntary or forced saving. The behavior of the baby boom generation will seemingly accomplish the former. But we, as a people, must ultimately face the question of whether we value continued progress sufficiently to tax ourselves to pay for it.

The economic accomplishments of the Fifties fueled a marvelous economic engine. But we would no longer wish to live with the economic standards that seemed so lofty then. The Nineties can provide the same long term impetus but require some more complex thought and effort lest we fall back to those standards.

Outlook for the Economy and Real Estate

THE ECONOMIC OUTLOOK

On the basis of preliminary data, the Commerce Department reported that the annual rate of real GNP growth during the third quarter reached 2.5 percent, the same rate of advance recorded in the second quarter, and generally in line with expectations. The third quarter report suggests key sector weaknesses that will likely carry forward into the next quarter, reducing projections for fourth quarter GNP growth. However, the third quarter report does paint a picture of the economy attaining the "soft landing" scenario in 1989, sought by most analysts and policymakers. Concerns of a recession, while not erased, have been at least moved back a few quarters. Instead, the ups and downs of the dollar and the stock market, and efforts to anticipate the Fed's next policy move will continue to act as wildcards in the economic outlook. The most likely scenario is one of even slower real GNP growth beginning in the fourth quarter of 1989 and continuing through 1990, and characterized by small increases in unemployment, falling interest rates, and no recession.

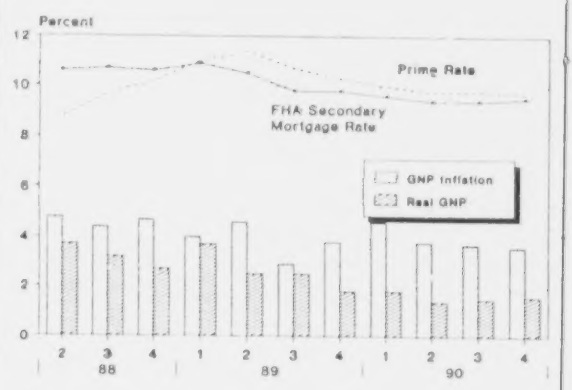
The Composition of 3rd Quarter GNP Growth

Signs of weakening in key components of the GNP report point toward this scenario of slower GNP growth beginning next quarter. For example, while consumer spending was up 5.8 percent in the third quarter compared to a modest 1.9 percent gain in the second, most of the third quarter advance was due to incentive-led car sales: durable spending rose at a 15.0 percent annual rate. But fourth quarter consumer spending will likely be down as the incentive plans typically borrow from future sales. In what was perhaps the biggest surprise of the GNP report, the external deficit, as measured by real net exports, deteriorated by nearly $23 billion, falling to a deficit of $74.1 billion. This component of the preliminary GNP report is particularly prone to revision, as the Commerce Department only has two months of data available when it makes this initial estimate. The tremendous drag on economic growth by the external sector was only partially offset by a surge in inventory investment. Yet, the higher than expected inventory build-up could mean slower growth in the next quarter as businesses turn to reducing their stocks in the face of slower consumer spending.

Growth in Personal Income & Spending Slow

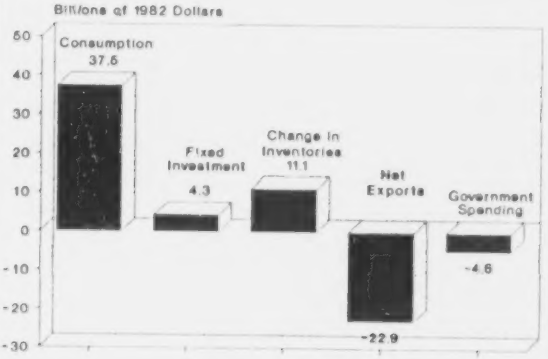
Evidence of weaker consumer spending emerged in the monthly data at the end of the third quarter: personal spending growth slowed to a modest 0.2 percent in September, reaching an annual rate of $3.526 trillion. Stronger personal spending patterns earlier in the third quarter had contributed a great deal to last quarter's advance in real GNP. The small September gain was the slimmest monthly advance in a year, and sets the stage for a markedly slower fourth quarter. Personal income rose by only 0.3 percent in September, but it would have advanced by 0.6 percent without Hurricane Hugo. The car purchases that drove personal spending during the summer are expected to leave a hole in spending patterns in the fourth quarter, at a time when personal income growth is easing: the expected result is a shy consumer.

GRAPH 1: THE ECONOMIC OUTLOOK



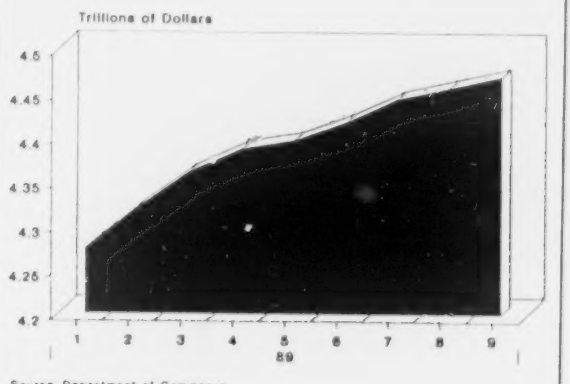
Source: Bureau of Economic Analysis; E. NAR estimates

GRAPH 2: COMPOSITION OF GNP GROWTH



Source: Bureau of Economic Analysis

GRAPH 3: PERSONAL INCOME GROWTH SLOWS



Source: Department of Commerce

Source: Department of Commerce

Does "Soft Landing" Mean Softer Inflation?

The most recent information on consumer price inflation might suggest it does, but other indicators point to a core rate of inflation of about 4 to 4.5 percent. The consumer price index rose by a slight 0.2 percent in September, after staying unchanged in August. Month-to-month changes can be misleading, so it pays to look at the CPI advances over the course of 1989. For the first three quarters, the CPI has risen at a 4.4% annual rate. The annual rate of change in the CPI has been 5.4% in the first quarter, 6.4% in the second, and 2.4% in the third. Most of the recent easing in inflation has come from falling energy prices and milder increases in food prices. However, wages and salaries have been rising at a faster rate than the overall CPI number suggests. The Labor Department reports that wages and salaries, as measured in its employment cost index, rose by 1.6 percent in the third quarter, and are up 4.6 percent for the 12 months ending in September, compared to a 3.9 percent increase for the previous 12 months. This suggests that inflationary pressures are still bubbling under the temporary calm brought on by lower energy prices.

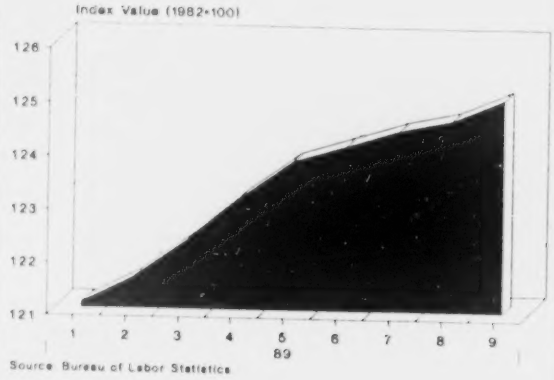
The Stock Plunge

It was scarier than any Friday the 13th imaginable: the Dow dropped 190 points in the last 90 minutes of trading and sent financial market players home for a nervous weekend full of frightening Monday morning scenarios. But heavy buying by bargain hunters helped to quickly restore much of Friday's losses midway through the following week. Apparently, an announcement by the lead banks in the UAL loan syndication that the deal would not proceed, led to fears that banks had become more cautious in their approach to LBO's; this in turn was seen to threaten many rumored deals. A correction for stocks of rumored takeover targets might not have been so damaging in its own right: many of these stocks appeared to be tremendously overvalued. However, the collapse of the takeover stocks pulled down the "good" stocks as well, due to program trading. The stocks not linked to takeovers rebounded strongly on Monday, but prices of many takeover stocks remained depressed. This plunge is different from October 1987, in that it is not expected to have any direct consequences to real GNP growth because stocks are not generally believed to be overvalued today. However, it might prompt the Fed into easing rates again.

Interest Rates Should Continue to Ease

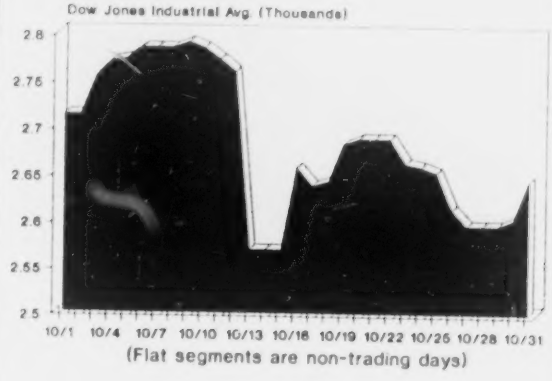
The Monday following the market plunge, the Fed pumped liquidity into the markets; less so than in October 1987, but enough to push the federal funds rate to as low as 8.5% during that week. After the market recovered, the Fed let the funds rate rise to a trading range of between 8.5% and 8.75%. As more data emerges to confirm a sluggish economy in the fourth quarter, the Fed will likely allow the federal funds rate to drift lower in the current quarter, and perhaps into the first half of 1990. The 30-year government bond rate is expected to fall to 7.9% by the end of 1989, and average 7.6% in 1990. Mortgage interest rates are expected to hover around 9.75% through the end of 1989, before sliding lower in early 1990.

GRAPH 4: HAS INFLATION REALLY SLOWED?



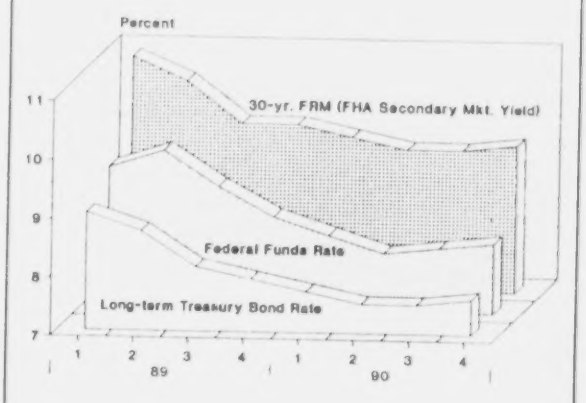
Source: Bureau of Labor Statistics

GRAPH 5: RUMORS RISE, STOCKS FALL



Source: The Wall Street Journal

GRAPH 6: INTEREST RATE OUTLOOK



Source: Federal Reserve, NAR Estimates

HOUSING STARTS

(Seasonally Adjusted Annual Rates, in Thousands)

NATIONAL DATA

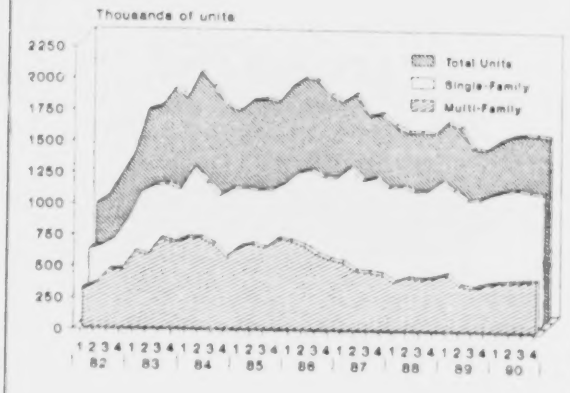
		Total	S-F	2-4	5 and up
Sep	1989	1263	971	51	241
Aug	1989	1332	992	53	287
Jul	1989	1420	1026	57	337
Jun	1989	1406	972	55	379
May	1989	1308	977	42	289
Sep	1988	1463	1039	62	362
Sep 1989 Changes From (%):					
Aug	1989	-5.2	-2.1	-3.8	-16.0
Sep	1988	-13.7	-6.5	-17.7	-33.4

REGIONAL DATA

		Northeast	Midwest	South	West
Sep	1989	170	243	477	373
Aug	1989	145	236	565	386
Jul	1989	189	274	531	426
Jun	1989	168	242	552	444
May	1989	176	244	513	375
Sep	1988	206	258	576	423
Sep 1989 Changes From (%):					
Aug	1989	17.2	3.0	-15.6	-3.4
Sep	1988	-17.5	-5.8	-17.2	-11.8

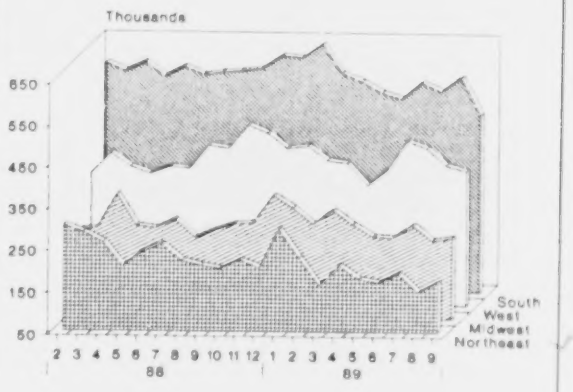
Source: Bureau of the Census; Construction Reports, Series C20

GRAPH 7: HOUSING STARTS



Source: Bureau of Census; Real Estate Outlook forecast

GRAPH 8: HOUSING STARTS BY REGION



Source: Bureau of Census

Housing starts activity was dealt a setback in September, as total starts fell to an annual rate of 1.263 million units, 5.2 percent below the August rate of 1.332 million units, and 13.7 percent behind the September 1988 pace. The last two monthly declines have brought housing starts activity to its slowest pace in seven years. Single-family starts retreated to an annual rate of 971 thousand units, 2.1 percent below the August rate of 992 thousand units, and 6.5 percent slower than the September 1988 annual rate of 1.039 million units. Starts of structures containing 2-4 units declined 3.8 percent in September to an annual rate of 51 thousand units. Multi-family starts of structures containing 5 or more units declined 16 percent in September to an annual rate of 241 thousand units, and 33.4 percent below the September 1988 annual rate of 362 thousand units.

By region, the pace of starts activity was up 17.2 percent in the Northeast to an annual rate of 170 thousand units in September, but remained 17.5 percent below the year ago rate. Starts also rose in the Midwest, where they were up 3.0 percent to an annual rate of 243 thousand units, but were down 5.8 percent from their year ago pace. Activity slowed sharply in the South, where starts fell 15.6 percent to an annual rate of 477 thousand units, and were 17.2 percent below the September 1988 annual rate. Starts were down in the West as well, where they fell 3.4 percent to an annual rate of 373 thousand units, a rate 11.8 percent slower than that experienced in September 1988.

NEW HOME SALES

(Seasonally Adjusted Annual Rates, in Thousands)

NATIONAL DATA

Sep	*1989*	*618*	*Feb*	*1989*	*621*
Aug	*1989*	*719*	*Jan*	*1989*	*700*
Jul	*1989*	*742*	*Dec*	*1988*	*669*
Jun	*1989*	*647*	*Nov*	*1988*	*650*
May	*1989*	*653*	*Oct*	*1988*	*718*
Apr	*1989*	*607*	*Sep*	*1988*	*691*
Mar	*1989*	*555*			

Sep 1989 Changes From:			*Annual Totals:*	
Aug	*1989*	*-14.0*	*1987*	*671*
Sep	*1988*	*-10.6*	*1988*	*676*

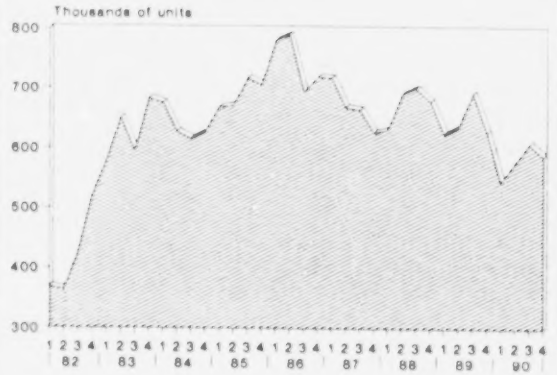
REGIONAL DATA

		Northeast	*Midwest*	*South*	*West*
Sep	*1989*	*58*	*96*	*252*	*211*
Aug	*1989*	*90*	*96*	*299*	*234*
Jul	*1989*	*101*	*127*	*284*	*230*
Jun	*1989*	*73*	*99*	*259*	*215*
May	*1989*	*89*	*99*	*271*	*195*
Apr	*1989*	*82*	*99*	*244*	*182*
Sep	*1988*	*86*	*99*	*261*	*245*
	1988	*102*	*97*	*276*	*202*
	1987	*117*	*97*	*271*	*186*

Sep 1989 Changes From:					
Aug	*1989*	*-35.6*	*0.0*	*-15.7*	*-9.8*
Sep	*1988*	*-32.6*	*-3.0*	*-3.4*	*-13.9*

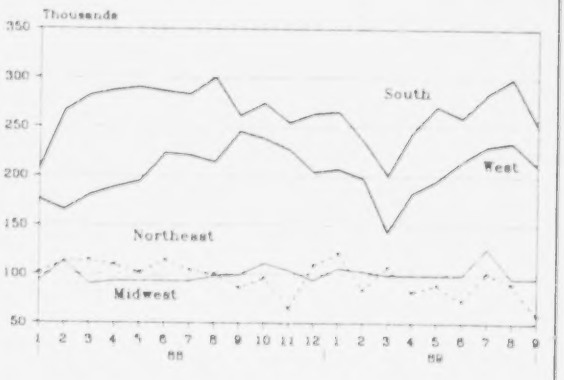
Source: Bureau of the Census; Construction Reports, Series C25

GRAPH 9: NEW HOME SALES



Source: Bureau of Census; Real Estate Outlook forecast

GRAPH 10: NEW HOME SALES BY REGION



Source: Bureau of Census

After two months of relatively strong activity, September sales of new single-family homes fell to an annual rate of 618 thousand units, down 14.0 percent from the August annual rate of 719 thousand units; and 10.6 percent below the September 1988 annual rate of 691 thousand units. New home sales estimates are often prone to large monthly swings, and the revisions of these statistics can also be substantial. In fact, the August 1989 report on new home sales originally pegged the annual rate of sales during the month at 755 thousand units. The September report revised down the original August estimate to an annual rate of 719 thousand units. Through the first three quarters of 1989, new single-family home sales have averaged an annual rate of 651 thousand units.

By region, sales of new homes were unchanged in the Midwest (at an annual rate of 96 thousand units), but slowed in each of the other three regions. The Northeast region suffered the largest decline, as new home sales fell 35.6 percent to an annual rate of 58 thousand units; the sales pace was also down 32.6 percent from its September 1988 annual rate of 86 thousand units. Sales in the South retreated to an annual rate of 252 thousand units, down 15.7 percent from August, and 3.4 percent slower than the September 1988 annual rate. New home sales in the West region slipped 9.8 percent to an annual rate of 234 thousand units, and were 13.9 percent below the 245 thousand unit sales pace of September 1988.

EXISTING SINGLE-FAMILY HOME SALES

(Seasonally Adjusted Annual Rates, in Thousands)

NATIONAL DATA

Sep	1989	3630	Feb	1989	3480
Aug	1989	3480	Jan	1989	3550
Jul	1989	3330	Dec	1988	3920
Jun	1989	3360	Nov	1988	3710
May	1989	3210	Oct	1988	3680
Apr	1989	3400	Sep	1988	3650
Mar	1989	3400			

Sep 1989 Changes From (%):			Annual Totals:	
Aug	1989	4.3	1988	3594
Sep	1988	-0.5	1987	3526

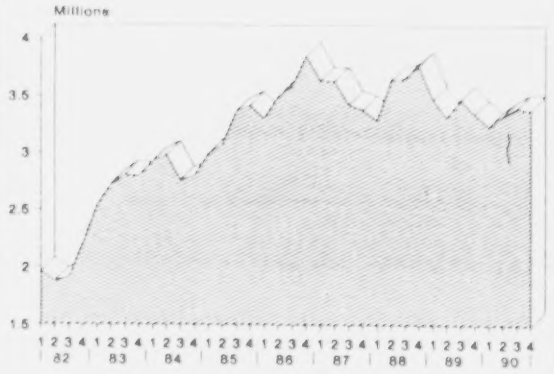
REGIONAL DATA

		Northeast	Midwest	South	West
Sep	1989	590	990	1400	620
Aug	1989	590	980	1350	550
Jul	1989	550	910	1300	570
Jun	1989	510	960	1280	600
May	1989	610	810	1230	580
Apr	1989	610	890	1280	620
Sep	1988	650	910	1390	700
	1988	673	929	1350	642
	1987	685	959	1282	600

Sep 1989 Changes From (%):					
Aug	1989	0.0	1.0	3.7	12.7
Sep	1988	-9.2	8.8	0.7	-11.4

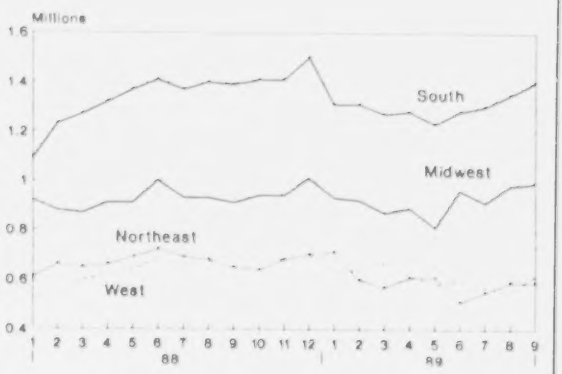
Source: NATIONAL ASSOCIATION OF REALTORS® Economics and Research Division

GRAPH 11: EXISTING HOME SALES



Source: NAR Economics & Research; Real Estate Outlook forecast

GRAPH 12: EXISTING HOME SALES BY REGION



Source: NAR Economics & Research

Sales of existing single-family homes rose strongly in September to an annual rate of 3.63 million units, an increase of 4.3 percent from the revised August annual rate of 3.48 million units; and virtually unchanged from the September 1988 annual rate of 3.65 million units. The September 1989 rate was the fastest monthly rate for existing single-family home sales since the 3.92 million unit rate of December 1988. Since up to 70 percent of the volume reported in this sales series can come from local real estate boards that report sales based on closing (rather than contract) dates, much of the strength in the September rate is likely from early summer contracts. Attractive mortgage rates continuing into the final quarter of 1989 is expected to sustain the pace of existing home sales at an annual rate of almost 3.4 million units, before slowing in the first half of 1990 to an average annual rate of 3.29 million units.

By region, the pace of existing home sales remained unchanged in the Northeast (at an annual rate of 590 thousand units), and rose in each of the other regions. September sales in the West rose 12.7 percent to an annual rate of 620 thousand units, but were 11.4 percent below their year ago pace. Sales in the South rose 3.7 percent in September to an annual rate of 1.4 million units, 0.7 percent above the September 1988 rate. In the Midwest, sales rose a scant 1.0 percent to an annual rate of 990 thousand units, but were reported to be 8.8 percent higher than their September 1988 annual rate.

SINGLE-FAMILY HOME PRICES

(In Dollars)

NATIONAL DATA

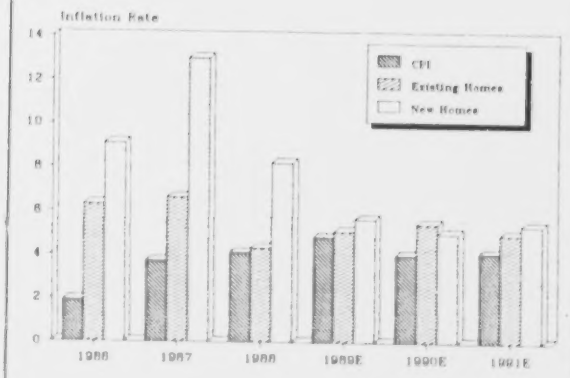
		Median		Average	
		Existing	*New*	*Existing*	*New*
Sep	*1989*	*93,400*	*122,500*	*117,400*	*154,400*
Aug	*1989*	*94,800*	*122,200*	*120,800*	*161,300*
Jul	*1989*	*96,700*	*117,000*	*122,100*	*141,800*
Jun	*1989*	*93,400*	*122,800*	*118,800*	*153,600*
May	*1989*	*92,600*	*119,000*	*118,000*	*145,100*
Sep	*1988*	*88,500*	*116,600*	*112,600*	*142,700*
1988		*89,300*	*112,500*	*112,800*	*138,300*
1987		*85,600*	*104,500*	*106,300*	*127,200*
Sep	*1989*				
Changes From (%):					
Aug	*1989*	*-1.5*	*0.2*	*-2.8*	*-4.3*
Sep	*1988*	*5.5*	*5.1*	*4.3*	*8.2*

REGIONAL DATA

		Northeast	*Midwest*	*South*	*West*
Sep	*1989*	*144,800*	*71,800*	*84,200*	*144,300*
Aug	*1989*	*149,000*	*71,900*	*86,100*	*147,500*
Jul	*1989*	*147,100*	*73,400*	*87,200*	*146,500*
Jun	*1989*	*149,900*	*72,000*	*85,000*	*134,500*
May	*1989*	*143,800*	*70,300*	*84,100*	*142,300*
Sep	*1988*	*141,500*	*67,500*	*81,400*	*128,300*
1988		*143,000*	*68,400*	*82,200*	*124,900*
1987		*133,300*	*66,000*	*80,400*	*113,200*
Sep	*1989*				
Changes From (%):					
Aug	*1989*	*-2.8*	*-0.1*	*-2.2*	*-2.2*
Sep	*1988*	*2.3*	*6.4*	*3.4*	*12.5*

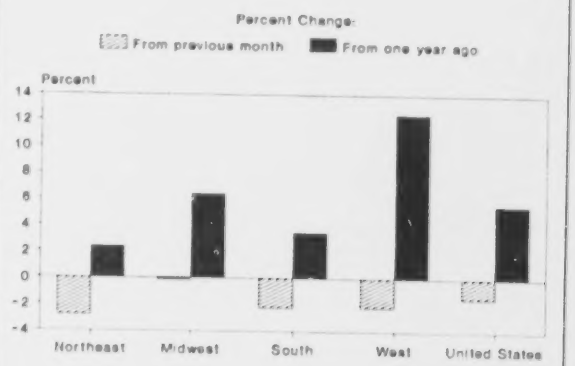
Source: NATIONAL ASSOCIATION OF REALTORS® Economics and Research Division

GRAPH 13: HOME PRICES



Source: Bureau of Census; E Real Estate Outlook forecast

GRAPH 14: HOME PRICES BY REGION



Source: NAR Economics & Research; Real Estate Outlook forecast

Despite the faster rate of existing single-family home sales, the median price of an existing home fell to $93,400 in September, 1.5 percent below the August median price of $94,800. However, over the past 12 months, the median price of an existing single-family home rose by 5.5 percent from the $88,500 median price of September 1988. All regions reported a decline in the median price, though the median price for the Midwest fell only $100 to $71,800, or 0.1 percent. In the Northeast, the median price fell 2.8 percent to $144,800, but was 2.3 percent higher than the September 1988 median price. In the South, the median price fell 2.2 percent to $84,200, but remained 3.4 percent above its year ago mark. In the West, the median price fell 2.2 percent to $144,300, but was up by 12.5 percent from its September 1988 mark.

The median price of a new single-family home rose by 0.2 percent in September to $122,500. This median price was 5.1 percent higher than the September 1988 median price of $116,600. The average price of a new single-family home fell 4.3 percent in September to $154,400, but was 8.2 percent higher than the September 1988 median price of $142,700.

Sean A. Burns
Director of Forecasting

FRMs, ARMs, GPMs, AND THE COST OF HOUSING - A CASHFLOW ANALYSIS

INTRODUCTION

During the last decade a vast array of different mortgage loans have reached the market. Although homebuyers now have many more mortgage options, they are also having a difficult time choosing among these loan alternatives. The choice, however, is important as it will impact directly on the cost of housing.

The objectives of this article are (1) to describe the characteristics of the most commonly used mortgages, (2) to discuss which type of mortgage instrument is best suited for certain types of households and, (3) to show how the choice of loan product will affect the costs of home ownership under different economic scenarios.

DESCRIPTION OF LOAN ALTERNATIVES AND STUDY ASSUMPTIONS

In this article, three of the most popular types of residential loans are examined -- the standard fixed rate, level payment mortgage (FRM), the adjustable rate mortgage (ARM), and the graduated payment mortgage (GPM).

The FRM serves as a benchmark against which to compare the other loan options. For the level payment, fixed rate loan we use a 10 percent mortgage interest rate. The increasing popularity of the ARM can be attributed to a number of factors, including the severe inflation encountered in the late 1970s and early 1980s and statutory and regulatory changes that have made lender cost of funds more variable. In the new environment of increased interest rate volatility, lenders have grown reluctant to lend at fixed rates for relatively long periods of time. Rates on ARMs are adjusted up or down based upon changes in financial indices. The two most common indices are based upon the one year Treasury Bill rate and the Federal Home Loan Bank Board's Cost of Funds Index. For the adjustable rate mortgage loan examples we assume an initial interest of 8.75 percent, 125 basis points below the FRM rate. The ARM in this example is structured with annual payment adjustments, with the interest rate indexed to the one year Treasury Bill rate. The ARM loan has a 2 percent annual interest rate cap and a life of the loan cap of 5 percentage points. In the worst case scenario, mortgage interest rates are assumed to rise continuously throughout the 5 year period, exceeding the annual 2 percent cap each year. Consequently, we adjust the interest rate by 2 percent for the first two years and 1 percent in year three, thereby reaching the maximum rate allowed under the life of the loan cap of 13.75 percent. The second scenario assumes the interest rate increases 1 percent a year, while the last case uses historical data to illustrate the effects of declining rates.

The GPM illustrated in this article is a fixed rate loan, also at 10 percent, which provides for a 7.5 percent per annum increase in loan payments for 5 years, after which time the payments remain constant for the remainder of the loan's term. The objective of the GPM is to provide for a series of mortgage payments that are lower in early years of the loan than would be the case with a standard mortgage loan. Because the initial payments in the first four years of the loan are not large enough to cover all the interest due, no amortization of principal occurs. The unpaid interest accrues and is added to the loan balance. This "negative amortization" continues, increasing the outstanding balance of the loan, until monthly loan payments rise above the periodic interest due on the loan, after which time the loan balance begins to decline, being fully amortized over the remaining term of the GPM.

In order to account for the time value of money, we use discounted cashflow analysis to compare the costs of these financing options. The cashflows associated with homeownership can be conveniently organized into three categories or phases. In the initial phase, we have the one-time costs of the closing and the downpayment. In the second, or operating phase, there is debt service, property taxes, maintenance expenses and tax savings. The tax savings results from the deduction of property taxes and mortgage interest in the computation of the homeowner's taxable income, which reduces his federal income taxes. In the terminal stage, we have the net proceeds from sale, which is equal to the selling price for the house net of the commission and selling costs less the outstanding balance of the mortgage. We assume any gains from sale realized by the homeowner are rolled over into the purchase of a new home, thereby deferring any tax on the gain.

Tables 1 through 4 display the cashflows associated with the purchase of a home in 1989 using the different mortgage instruments. In the examples used here, the home price is $92,000, the downpayment is 20.50 percent, and closing costs are 5 percent. Property taxes and maintenance costs are calculated as 1.2 percent and 1.0 percent of the current market value of the home, which is assumed to increase at an average annual rate of 4.7 percent. The commission is 6 percent of the selling price which is projected to be $115,750 after 5 years, which translates into a 4.7 percent average annual rate of appreciation. All the above numbers are based upon a national housing and interest rate data obtained from selected issues of the Federal Reserve Bulletin and the July 1989 issue of National Association of Realtors® 's Home Sale Report.

To keep the calculations manageable, we assume the home is sold after 5 years. Even if not true for many homeowners, 5 years is a good planning horizon for these types of financial comparisons. We also assume the homeowner is in the 28 percent marginal tax bracket.

Last, the discount rate chosen for the current examples is 8.25 percent, the approximate yield on 5 year Treasury Notes, and a reasonable approximation of a typical homeowner's opportunity cost of capital. For the historical comparison, one year Treasury Bill rates are used since they represented the best, default-free return for the small investor during the period chosen, which was 1980 through 1985. During this period, the T-Bill rate ranged from a high of 13.14 percent to a low of 8.08 percent.

COMPARISON OF THE INSTRUMENTS

A comparison of the three types of loan alternatives

displayed in the first four tables reveals that, in terms of cost, the FRM proved to be the least costly financing arrangement. The total after tax discounted cost of housing for the five year period was $27,822. Not surprisingly, given our assumptions, the ARM proved to be the most expensive, with the worst case scenario costing the homeowner $31,384, over $3,500 more than the FRM, even after discounting the much higher debt service in the later years of the ARM. Calculating the worst case scenario allows homebuyers to determine whether they can afford the maximum monthly and annual cash outflows that could result should they finance their home purchase with an ARM.

ARMs are not always more expensive than fixed rate loans. As Tables 5 and 6 indicate, had the current type of ARM been in place in 1980, it would have been actually less costly than a fixed rate mortgage. If we were to extend the homeowner's tenure to 8 years, to the end of 1987, the ARM would have proven significantly less expensive as interest rate fell almost 650 basis points during this time period.

The GPM proved to be an interesting case. Although the total cost proved to be nominally a bit more expensive ($200) then the fixed rate loan, with the GPM the homeowner has the benefit of much lower debt service payments during the early years of the loan. The smaller debt service not only increases budgetary flexibility but, for homeowners who have the opportunity of investing the payment differentials, the GPM can easily be the least costly loan alternative.

The other aspect of the GPM that warrants attention is the tax treatment of negative amortization. The difference between the interest due and the actual mortgage payment (col. 4 minus col. 3) is unpaid interest which is compounded forward and added to the loan balance. It can be seen from Table 4 that the balance increases for the first four years and then begins to decline once the mortgage payment exceeds the interest due on the loan. The difference between the outstanding loan balance and the initial loan amount reflects total accrued interest over the 5 year period and can be taken as a tax deduction in the year of sale.

Beside cost considerations, there are many other factors a home buyer should consider when deciding on how to finance the acquisition of a home. For conservative households, the FRM may be the most appropriate instrument because payments are constant over the life of the loan, thereby making budget planning easier. Such borrowers are also spared the burden of increasing mortgage payments should interest rates rise in the future. In addition to the fixed payment, the borrower can start to build equity immediately. The payment pattern of the GPM may be best suited for young, upwardly mobile, first time homeowners who may not be able to qualify for or afford the higher payments of a FRM.

The initial interest rate on an ARM is normally lower than on a fixed rate loan. This lower rate makes the ARM attractive to buyers who might otherwise not qualify for a FRM. They can also prove less costly should interest rates remain relatively stable or decline during their tenure of ownership.

With respect to this last point, the choice of index can prove to be an important decision parameter. Some indices, such as the T-Bill rate adjust quickly to changing economic conditions. During periods of falling interest rates, loan payments will fall more quickly and by larger amounts for ARMs indexed to the T-Bill rate, then for ARMs based on the much slower adjusting and less volatile cost of funds index. If the borrower's principal concern is rising future loan payments, the Federal Home Loan Bank Board's Cost of Funds Index might be the better choice of index.

When adjustable rates were first developed, many of the loans offered very low initial interest rate, often referred to as "teaser rates." In some cases, these rates were far below prevailing FRM mortgage rates, and were used as a method of qualifying marginal homebuyers. The danger with teaser rate is that payment shock and default may occur when the rate and payments are adjusted upward on the first anniversary of the loan. The use of teaser rates also makes it difficult to compare the true costs of alternative ARM instruments. Some predictability can be built into the loan by including provisions for caps. These caps, which are now common to most ARMs, offer protection to the borrower by limiting the size of future payment increases, thereby minimizing payment shock, and thus default.

CONCLUSION

In summary, the consumer has to consider many different factors when determining how best to finance a home purchase. These factors include the household's current and expected future income, anticipated inflation during their tenure of ownership, and the investment opportunities available to each homeowner. Using the type of analysis illustrated in this article, homebuyers can find the mortgage loan best tailored to their needs.

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Table 1
Current Cost of Housing
30 YEARS FIXED-RATE MORTGAGE

MEDIAN PRICE OF EXISTING HOUSE: $92,000 (1989)
HOUSE APPRECIATION RATE: 4.7%
DOWNPAYMENT: 20.50%
MAINTENANCE EXPENSES: 1.00%
TAX RATE: 28%
PROPERTY TAX: 1.20%
CLOSING COST: 5.00%
SELLING COST: 6.00%

Year	Property Taxes (1)	Maintenance Expenses (2)	Mortgage Payment (3)	Interest (4)	Mortgage Balance (5)	Annual Cash Outflow (6)=(1+2+3)	Tax Savings (7) =(1+4) Tax Rate	After Tax Cashflow (8)=(6-7)	Discount Rate (9)	Annual Discounted Cost (10)
1	1104.00	920.00	7758.64	7314.00	72695.36	9782.64	2357.04	7425.60	8.25%	6859.67
2	1155.85	963.20	7758.64	7269.54	72206.26	9877.69	2359.11	7518.58	8.25%	6416.23
3	1210.13	1008.44	7758.64	7220.63	71668.25	9977.20	2360.61	7616.59	8.25%	6004.50
4	1266.96	1055.80	7758.64	7166.83	71076.44	10081.39	2361.46	7719.93	8.25%	5622.14
5	1326.45	1105.38	7758.64	7107.64	70425.45	10190.47	2361.55	7828.92	8.25%	5266.99
										30169.53

Total Net Discounted Cost = $27822.6

Table 2
Current Cost of Housing
30 YEARS ADJUSTABLE-RATE MORTGAGE (THE "WORST" CASE)

Year	Property Taxes (1)	Maintenance Expenses (2)	Mortgage Payment (3)	Interest (4)	Mortgage Balance (5)	Annual Cash Outflow (6)=(1+2+3)	Tax Savings (7) =(1+4) Tax Rate	After Tax Cashflow (8)=(6-7)	Discount Rate (9)	Annual Discounted Cost (10)
1	1104.00	920.00	6961.90	6399.75	72577.85	8985.90	2101.05	6884.85	8.25%	6360.14
2	1155.85	963.20	8228.04	7802.12	72151.93	10347.09	2508.23	7838.86	8.25%	6689.55
3	1210.13	1008.44	9530.39	9199.37	71820.92	11748.95	2914.66	8834.29	8.25%	6964.47
4	1266.96	1055.80	10189.77	9875.38	71506.52	12512.52	3119.85	9392.67	8.25%	6840.34
5	1326.45	1105.38	10189.77	9832.15	71148.90	12621.60	3124.41	9497.20	8.25%	6389.34
										33243.8

Total Net Discounted Cost = $31383.67

Table 3
Current Cost of Housing
30 YEARS ADJUSTABLE-RATE MORTGAGE (THE "BAD" CASE)

Year	Property Taxes (1)	Maintenance Expenses (2)	Mortgage Payment (3)	Interest (4)	Mortgage Balance (5)	Annual Cash Outflow (6)=(1+2+3)	Tax Savings (7) =(1+4) Tax Rate	After Tax Cashflow (8)=(6-7)	Discount Rate (9)	Annual Discounted Cost (10)
1	1104.00	920.00	6961.90	6399.75	72577.85	8985.90	2101.05	6884.85	8.25%	6360.14
2	1155.85	963.20	7587.26	7076.34	72066.93	9706.31	2305.01	7401.30	8.25%	6316.15
3	1210.13	1008.44	8218.35	7747.20	71595.78	10436.91	2508.05	7928.86	8.25%	6250.68
4	1266.96	1055.80	8853.50	8412.50	71154.79	11176.25	2710.25	8466.00	8.25%	6165.48
5	1326.45	1105.38	9491.31	9072.24	70735.71	11923.15	2911.63	9011.51	8.25%	6062.59
										31155.03

Total Net Discounted Cost = $29016.88

Table 4
Current Cost of Housing
30 YEARS GRADUATED PAYMENT MORTGAGE

Year	Property Taxes (1)	Maintenance Expenses (2)	Mortgage Payment (3)	Interest (4)	Mortgage Balance (5)	Annual Cash Outflow (6)=(1+2+3)	Tax Savings (7) =(1+4) Tax Rate	After Tax Cashflow (8)=(6-7)	Discount Rate (9)	Annual Discounted Cost (10)
1	1104.00	920.00	5854.08	7266.00	74668.73	7878.08	1948.26	5929.82	8.25%	5477.89
2	1155.85	963.20	6293.16	7466.88	75897.77	8412.21	2085.72	6326.49	8.25%	5398.92
3	1210.13	1008.44	6765.12	7588.80	76761.26	8983.69	2233.07	6750.62	8.25%	5321.82
4	1266.96	1055.80	7272.48	7676.16	77183.99	9595.24	2391.04	7204.20	8.25%	5246.55
5	1326.45	1105.38	7817.88	7705.47	77071.58	10249.71	2528.94	7720.77	8.25%	5194.23
										26639.41

Total Net Discounted Cost = $28023.19

Table 5
Historical Cost of Housing
30 YEARS FIXED-RATE MORTGAGE

MEDIAN PRICE OF EXISTING HOUSE: $61,450 (1980)
HOUSE APPRECIATION RATE: 4.7%
DOWNPAYMENT: 20.50% TAX RATE: 28% CLOSING COST: 5.00%
MAINTENANCE EXPENSES: 1.00% PROPERTY TAX: 1.20% SELLING COST: 6.00%

Year	Property Taxes (1)	Maintenance Expenses (2)	Mortgage Payment (3)	Interest (4)	Mortgage Balance (5)	Annual Cash Outflow (6)=(1+2+3)	Tax Savings (7) =(1+4) Tax Rate	After Tax Cashflow (8)=(6-7)	Discount Rate (9)	Annual Discounted Cost (10)
1	737.40	614.50	6953.24	6814.96	48714.47	8305.14	2114.66	6190.48	10.89%	5582.54
2	772.03	643.36	6953.24	6795.67	48556.90	8368.63	2118.96	6249.67	13.14%	4882.30
3	808.29	673.57	6953.24	6773.69	48377.35	8435.09	2122.95	6312.14	11.07%	4606.66
4	846.24	705.20	6953.24	6748.64	48172.75	8504.68	2126.57	6378.12	8.80%	4551.73
5	885.98	738.32	6953.24	6720.10	47939.62	8577.54	2129.70	6447.84	9.92%	4018.19
										23641.43

Total Net Discounted Cost = $23904.20

Table 6
Historical Cost of Housing
30 YEARS ADJUSTABLE-RATE MORTGAGE

Year	Property Taxes (1)	Maintenance Expenses (2)	Mortgage Payment (3)	Interest (4)	Mortgage Balance (5)	Annual Cash Outflow (6)=(1+2+3)	Tax Savings (7) =(1+4) Tax Rate	After Tax Cashflow (8)=(6-7)	Discount Rate (9)	Annual Discounted Cost (10)
1	737.40	614.50	6467.36	6297.12	48682.51	7819.26	1969.67	5849.59	10.89%	5275.13
2	772.03	643.36	7380.62	7248.83	48550.71	8796.01	2245.84	6550.17	13.14%	5117.06
3	808.29	673.57	6555.91	6345.58	48340.38	8037.77	2003.08	6034.68	11.07%	4404.17
4	846.24	705.20	5570.14	5220.76	47991.00	7121.58	1698.76	5422.82	8.80%	3869.99
5	885.98	738.32	6043.91	5720.53	47667.62	7668.22	1849.82	5818.39	9.92%	3625.93
										22292.28

Total Net Discounted Cost = $22386.32

Sources for Tables 1 through 6: National Association of Realtors® Forecasting and Policy Analysis Division Estimates

DEMOGRAPHIC TRENDS INFLUENCING SINGLE-HEADED HOUSEHOLDS

The strong growth in the total number of households as experienced between 1970 and 1987 is expected to continue into the mid-1990s as the low end of the baby boom cohort reaches their early 30s. Over that 17 year period the number of households increased an annual average of 1.53 million units. It should be noted that the trend toward delayed marriage, increasing numbers of singles and increasing numbers of elderly living alone has actually strengthened the increasing number of households headed by this cohort. However, as indicated in Table 1, by the late 1990s, the rate of increase in households is expected to fall as households formed by the baby boom cohort reaches its stage of maturity, and, the next generation of young (1965-1975) entering their 20s and 30s shrink in absolute numbers. Although, if the trend toward delayed marriages, fewer children, increasing numbers of singles, and increasing number of elderly living alone continues for this younger cohort, the fall in the growth of households will be slowed, as more of these cohorts choose independent living arrangements. One important change has been an increase in one-person households which, in absolute numbers, has more than doubled since 1970. Of all households in the United States, one-person households increased from 17.1 percent in 1970, to 22.7 percent in 1980 and up to 24.0 percent in 1988. (See Table 1.)

Some major demographic trends influencing the rate at which people choose independent living arrangements and/or to remain single include the increase in the number of women entering the labor force (resulting in greater financial independence), the prevalence of divorce, increasing numbers of widows(ers) due to longevity, and the change of societys acceptance of later marriages and the resulting marketing schemes targeted specifically for single people, re-enforcing the notion that it is 'OK' to be single.

Labor force participation rates for women of prime working age (25-54) represented 22.1 percent of the civilian work force in 1972, 25.3 percent in 1979, 29.8 in 1986, and is projected to increase to 34.4 percent by the year 2000. (See Table 2.) In 1986, an estimated 70.8 percent of all women ages 25-54 were in the labor force, while 80.8 percent are expected to be in the labor force by the year 2000.[1] The overall participation rate for women increased from 43.9 percent in 1972 to 55.3 percent in 1986. (See Table 3.)

Increasingly, regardless of child bearing years, when todays women enter the work force they are there to stay. A greater number of todays women are electing to remain at work for several reasons: Price appreciation of housing has exploded over the past 10 years and in order to attain the "American Dream" of homeownership, dual earner households are often necessary to meet monthly mortgage home payments, this, though, does not equate necessarily to the necessity of marriage to solve the need for dual income earners with regard to the purchase of a home. Individuals may choose to co-habitat without marital intention and or to join into a partnership with the sole purpose of purchasing a home. Todays women are more educated and often feel compelled to use their expertise to the extend that they consciously choose to remain at work, and in the event that they have children, will choose to purchase the labor of home care for their children. Many women and men are choosing to delay both marriage and child bearing until their mid to late 30s - opting for the opportunity to pursue their careers and attain financial independence. Often professional single women and men will purchase a home either independently and/or co-buy with a partner or an investor. Co-buying with an investor has become more common in recent years, where the buyer and investor will enter into an agreement where the investor will finance a negotiated sum in return for a share of the equity in the home. The decision to remain 'single' no longer equates necessarily to singles 'renting' their living accommodations. Singles, particularly those without children tend to have the opportunity to concentrate on their professional careers, leading to promotions and thus increasing their percentage amount of disposable income. Disposable income is often directed into tax incentive saving, such as the purchase of a new or an existing single family home or condominium.

The repercussions of the baby-bust generation entering the work force is interesting. According the U.S. Bureau of Census, in the year 2000 the civilian labor force comprised of 20-34 year olds is projected to reach 45.41 million, down 9.25 percent from the 1986 level of 50.03 million.[2] With the fall in absolute numbers of civilians in the labor force, high demand for employees and falling supply of labor will push up wages paid to employees both skilled and unskilled, ceteris paribus. Assuming that wages increases greater than inflation, disposable income for most workers between 20-34 will increase. Greater affluence among this cohort is guaranteed to be more wide spread compared to that of their predecessor. This (an increase in disposable income), combined with the trend toward individuals to postpone marriage and/or have fewer children will improve their financial position well above that of the baby boom generation - improving their purchasing power to invest in the American Dream, a home.

Also, one may decide to re-single due to the choice of divorce. In 1981 the total number of divorces peaked at 1.2 million. And, in 1987 an estimated 8.0 percent of all divorced households (4.8 million) continued to own their home compared to 5.2 percent in 1977 (2.5 million).[3] When households split or uncouple due to divorce it is commonly thought that one household becomes two households, of course there is always the situation where one divorcee may choose to return to a parents home or to join an existing group house. But generally speaking, especially when children are involved, two households are generated in the event of uncoupling. In recent years the percent of divorced households to all households has been on the

Table 1

TOTAL HOUSEHOLDS BY MARITAL STATUS, 1970-1988 AND PROJECTIONS TO 2000

Year	Total Households (thousands)	Annual Growth Rate	% Married Couples	% Single Persons	% Other Family	% Non-Family
1970	63,401	-	70.5%	17.1%	10.0%	1.7%
1975	71,120	2.43%	66.0	19.6	12.1	2.3
1980	80,776	2.71	60.8	22.7	12.9	3.6
1981	82,368	1.97	59.8	23.0	13.3	3.9
1982	83,527	1.41	59.4	23.2	13.7	3.7
1983	83,918	0.47	59.5	22.9	13.7	3.9
1984	85,407	1.77	58.6	23.4	14.0	4.0
1985	86,789	1.62	58.0	23.7	14.3	4.0
1986	88,458	1.92	57.6	23.9	14.3	4.2
1987	89,479	1.15	57.6	23.6	14.5	4.3
1988	91,061	1.77	56.9	24.0	14.6	4.4

5-Year Projection

Year	Total Households (thousands)	5-Year Growth Rate
1970	63,401	-
1975	71,120	12.2%
1980	80,776	13.6
1985	86,789	7.5
1990	94,227	8.6
1995	100,308	6.5
2000	105,933	5.6

SOURCES: U.S. Bureau of the Census, Current Population Reports, Series P-23, No. 150, Population Profile of the United States: 1984/85, U.S. Government Printing Office, Washington, D.C., 1987, Table A-1, pp. 44-45; U.S. Bureau of the Census, Statistical Abstract of the United States: 1989 (109th edition), U.S. Government Printing Office, Washington, D.C., 1989, Tables 58 and 59, p. 45; and Thomas Exter "Census Bureau's Household Projections," American Demographics, Vol. 8 (Oct. 1986), p. 47.

Table 2
CIVILIAN LABOR FORCE DISTRIBUTION AND GROWTH RATES, 1972, 1979, 1986 AND PROJECTED FOR 2000

	Percent Distribution				Annual Rate of Change	
Group	1972	1979	1986	2000	1972-79	1986-2000
Women 16 and Over	38.5%	42.1%	44.5%	47.3%	4.1%	1.6%
16 - 24	10.3	11.2	9.4	8.0	4.0	NA
25- 54	22.1	25.3	29.8	34.4	4.8	2.2
55 and Over	6.1	5.6	5.2	4.9	1.4	0.7
Men 16 and Over	61.5	57.9	55.5	52.7	1.8	0.8
16 - 25	12.9	13.0	10.4	8.3	2.8	-0.4
25 - 54	38.1	36.1	37.7	38.2	1.9	1.3
55 and Over	10.5	8.7	7.4	6.2	--	-0.1
Total 16 and Over	100.0	100.0	100.0	100.0	2.7	1.2

SOURCE: Howard N. Fullerton, Jr., "Projections 2000, Labor Force Projections: 1986 to 2000," Monthly Labor Review, (September 1987), p. 20.

Table 3
CIVILIAN LABOR FORCE PARTICIPATION RATES, BY SEX AND AGE 1972, 1979, 1986 AND PROJECTED FOR 2000

Group	1972	1979	1986	2000
Men 16 and Over	79.0%	77.8%	76.3%	74.7%
16 to 19	58.1	61.5	56.4	60.2
20 to 24	83.9	86.4	85.8	87.5
25 to 34	95.7	95.3	94.6	93.6
35 to 44	96.4	95.7	94.8	93.9
45 to 54	93.2	91.4	91.0	90.1
55 to 64	80.4	72.8	67.3	63.2
65 and Over	24.3	19.9	16.0	9.9
Women 16 and Over	43.9	50.9	55.3	61.5
16 to 19	45.8	54.2	52.9	59.2
20 to 24	59.1	69.0	72.4	78.4
25 to 34	47.8	63.9	71.6	82.3
35 to 44	52.0	63.6	73.1	84.2
45 to 54	53.9	58.4	65.9	75.4
55 to 64	42.1	41.7	42.3	45.8
65 and Over	9.3	8.3	7.4	5.4
Total 16 and Over	60.4	63.7	65.3	67.8

SOURCE: Howard N. Fullerton, Jr., "Labor Force Projections: 1986 to 2000," Monthly Labor Review, (September 1987), p. 25.

decline, reverting back to its mid 70s level. In 1977 divorce households represented 8.1 percent of allhouseholds, that number peaked in 1987 at 11.6 percent, but in 1987 the number of divorced householdswas only 8.0 percent. Reasons for this reversal are many, delayed marriage and the decision to remain single are among them. Marriages that occur at younger ages (as was typical in the 60s and 70s) tend to have a higher rate of divorce. With the trend toward postponing marriage to later years, one tends to be more mature and committed to a long lasting monogamous partnership. Also, with the recent threat of deadly diseases, couples are more apt to remain monogamous and work harder at maintaining that partnership. It is still probably true that when a household splits the income of the male increases while that of the women falls, but with increasing numbers of women in (and remaining in) the labor force, the number of divorced households that 'own' their homes may continue to increase as has statistically proven to be the case. The increasing participation rate of women in the work force may in fact be the reason for the increase in the number of divorced households owning their homes.

Though we have painted a rather positive scenario for single and/or re-single people and their ability to purchase a home with or without a partner, there still remains those who will not earn enough income to join in the ranks of homeownership, regardless of the partnership option. Appropriate housing supply may be found to be in short supply. Gone are the days of 'Levittown', where, after World War II veterans returned home to find an acute shortage of housing supply. Mr. William J. Levitt created the idea of mass producing small houses built on concrete slabs. Levittown housing is rarely constructed now-a-days and todays costs for residential building, small or large, have been pushed up considerably by political factors such as "restrictive zoning ordinances, elaborate and time-consuming building permit processes, and land use restrictions."[4]

Too, 'trade-up' houses may not be the answer to the solution for lower income singles, re-singles, and first-time homebuyers. With the elderly population living longer and choosing to both maintain their residence and live alone instead of living in an in-law apartment or housing for the elderly, may compound the problem of affordable housing. For single people who choose to live alone, some can not afford a large home, typical of those being built today. With the smaller number of population(baby bust), along with the increasing number of elderly living alone, and couples choosing to have smaller families, and also the shrinking of the middle-class, homebuilders will eventually respond to the market demand for smaller and more efficient housing. This is evident in Alexandria Virginia, where "people can't afford to go out and buy a standard single-family home... so what you're looking at in the future are smaller units. People are going to have to be satisfied with living in smaller spaces... only as a starting home".[5] According to J. Tuccillo, Chief Economist at the National Association of REALTORS "..changes we can expect to see in the market will be the continued move toward an even more complex financial market and an older population that will include fewer new households and smaller-sized households. As a result the demand for housing needs will be much different than it is today."[6] In the future, the real estate industry must recognize these changes and respond quickly to changing demographics. This is not to say that large and amenity filled homes will not be in demand for those singles who can afford them. For the more affluent, there will always be a 'supply,' whether it be a house or caviar. For those higher income individuals who prefer a large home they will have the option of purchasing a house from the existing stock of inventory or simply build a new one.

by
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1. Howard N. Fullerton, Jr., "Projections 2000, Labor Force Projections: 1986 to 2000," Monthly Labor Review, (September 1987), p.24.

2. Ibid., p.24.

3. Calculations based on data from U.S. Department of Commerce, Bureau of the Census, Current Population Reports, Series P-23, No. 150, Household and Family Characteristics [annual 1977-1987], U.S. Government Printing Office, and Population Profile of the United States 1984/85, Bureau of the Census, Washington, D.C.

4. Longman, Phillip. "The Mortgaged Generation: Why the young can't afford a house". Washington Monthly, April 1986, p.47.

5. Scannell, Nancy. "The Quest for Shelter". The Washington Post, April 28, 1982, p. 14.

6. Roketenetz Annemarie. 1989, "EOs hear speakers, share ideas during Boston seminar". REALTOR News, Volume 10, No. 8 April 24, 1989, p. 4.

U.S. ECONOMIC OUTLOOK

NOVEMBER 1989

	QUARTERS								YEARS				
	ACTUAL		FORECAST						ACTUAL		FORECAST		
	1989.2	1989.3	89.4	90.1	90.2	90.3	90.4	91.1	1987	1988	1989	1990	1991
AGGREGATE ECONOMY													
Gross National Product (billions of dollars)	5202	5273	5346	5430	5499	5569	5640	5728	4524	4881	5233	5534	5860
% Change	7.1	5.6	5.6	6.4	5.2	5.2	5.2	6.4	6.9	7.9	7.2	5.8	5.9
% Change (w/out inflation)	2.5	2.5	1.8	1.8	1.4	1.5	1.6	2.3	3.7	4.4	3.0	1.8	2.1
Consumer Price Inflation (CPI)	6.4	2.4	3.7	4.2	3.9	4.2	4.1	4.1	3.7	4.1	4.8	4.0	4.1
GNP Inflation (GNP Deflator)	4.6	2.9	3.8	4.6	3.8	3.7	3.6	4.0	3.1	3.3	4.2	3.9	3.7
Unemployment Rate - Civilian	5.3	5.2	5.3	5.4	5.5	5.5	5.6	5.7	6.2	5.5	5.3	5.5	5.6
Civilian Employment-Household Basis (millions)	117.3	117.5	117.7	117.9	118.2	118.4	118.6	118.9	112.4	115.0	117.3	118.3	119.4
Percent change	1.3	0.7	0.5	1.0	0.8	0.8	0.7	0.9	2.6	2.3	2.1	0.8	1.0
Index of Industrial Production	141.8	142.2	142.4	143.1	143.5	144.1	144.7	145.4	129.8	137.2	141.8	143.9	146.8
Manufacturing Capacity Utilization	84.4	84.0	83.6	83.5	83.5	83.6	83.7	83.7	81.0	83.6	84.1	83.6	83.6
Domestic Auto Sales	7.3	7.9	6.5	6.8	6.8	6.9	6.9	7.0	7.1	7.5	7.2	6.8	7.0
Federal Tax Receipts (NIPA) as % of GNP	20.2	19.7	19.7	20.4	20.5	20.5	20.5	20.5	20.1	19.9	20.0	20.5	20.5
Federal Expenditures (NIPA) as % of GNP	23.0	22.6	22.7	22.7	22.6	22.6	22.5	22.7	23.7	22.9	22.9	22.6	22.5
Deficit(NIPA)	-145.4	-152.9	-156.9	-125.3	-118.2	-118.7	-117.3	-125.6	-161.3	-145.9	-150.7	-119.9	-121.8
as % of GNP	-2.8	-2.9	-2.9	-2.3	-2.1	-2.1	-2.1	-2.2	-3.6	-3.0	2.9	-2.2	-2.1
REAL ESTATE MARKETS													
HOME SALES													
Total Single-family Home Sales (thousands, single-family resales plus 97 percent of single-family starts)	4286	4446	4360	4278	4383	4433	4402	4410	4633	4650	4402	4374	4443
Percent change -- year ago	-8.2	-5.2	-10.5	-5.2	2.3	-0.3	1.0	3.1	-1.6	0.3	-5.3	-0.6	1.6
Existing Single-family Home Sales (thousands)	3323	3480	3355	3245	3339	3404	3389	3408	3512	3594	3409	3345	3450
Percent change -- year ago	-8.8	-5.0	-11.0	-6.7	0.5	-2.2	1.0	5.0	-1.4	2.3	-5.2	-1.9	3.2
Housing Starts (thousands)	1352	1338	1406	1452	1466	1460	1448	1444	1634	1495	1404	1457	1435
Percent change -- year ago	-8.4	-8.8	-9.8	-4.3	8.4	9.1	3.0	-0.5	-9.8	-8.5	-6.1	3.8	-1.5
Single-Family Units	993	996	1037	1065	1076	1061	1044	1034	1156	1088	1024	1061	1024
Percent change -- year ago	-6.2	-6.1	-8.9	-0.4	8.4	6.4	0.7	-3.0	-2.2	-5.9	-5.9	3.7	-3.5
Multi-Family Units	360	342	370	387	390	400	405	411	477	407	380	395	411
2-4 Family Units	53	54	58	61	61	63	64	65	65	59	56	62	65
Percent change -- year ago	-8.1	-5.8	-11.2	2.3	15.4	16.9	9.5	6.2	-23.0	-9.5	-5.1	10.7	4.0
5+ Family Units	307	288	312	326	329	337	341	346	412	348	324	333	347
Percent change -- year ago	-15.0	-17.4	-12.2	-16.1	7.1	16.9	9.5	6.2	-24.4	-15.6	-6.9	2.9	4.0
New Single-family Home Sales (thousands)	636	693	628	546	577	610	588	616	673	677	646	580	649
Percent change -- year ago	-8.8	-1.1	-7.5	-12.7	-9.2	-12.0	-6.3	12.9	-9.6	0.5	-4.6	-10.1	11.8
HOME PRICES													
Existing Home Prices - Median $(1000)	93.0	95.0	94.5	96.2	97.9	100.2	99.7	101.4	84.9	88.9	93.4	98.5	103.4
Percent change -- year ago	4.6	5.3	6.6	5.4	5.3	5.5	5.5	5.4	5.8	4.7	5.1	5.4	5.0
New Home Prices - Median $(1000)	119.5	120.6	123.2	123.4	126.3	127.3	128.4	129.7	104.7	113.9	120.3	126.3	133.1
Percent change -- year ago	5.8	4.9	7.3	4.6	5.7	5.6	4.3	5.1	13.5	8.8	5.6	5.0	5.4
FINANCIAL MARKETS													
Long-Term Interest Rates													
30-year FRM (FHA Secondary)	10.5	9.8	9.8	9.6	9.4	9.4	9.5	9.7	10.2	10.5	10.3	9.5	9.8
1-year ARM (effective rate)	9.7	9.7	9.5	9.2	9.0	9.0	9.1	9.2	8.5	8.5	9.7	9.1	9.3
Corporate AAA Bond Rate	9.5	9.0	8.8	8.6	8.3	8.3	8.5	8.5	9.4	9.7	9.2	8.4	8.8
Government Bond Rate	8.7	8.1	7.9	7.7	7.5	7.5	7.6	7.8	8.6	9.0	8.4	7.6	8.0
Short-Term Interest Rates													
Federal Funds Rate	9.7	9.1	8.6	8.3	8.0	8.1	8.2	8.4	6.7	7.6	9.2	8.2	8.4
3-month T-Bill Rate	8.4	7.8	7.6	7.3	7.0	7.2	7.2	7.4	5.8	6.7	8.1	7.2	7.4
Prime Rate	11.4	10.7	10.3	10.0	9.8	9.8	9.7	9.7	8.2	9.3	10.8	9.8	9.8
Discount Rate	7.0	7.0	7.0	7.0	6.7	6.5	6.5	6.5	5.7	6.2	6.9	6.7	6.5
Value of the U.S. Dollar (Trade-Weighted Avg.)	100.4	100.5	97.9	96.2	93.9	91.8	90.4	89.7	96.9	92.8	98.7	93.1	89.9
Percent change	19.7	0.4	-9.8	-6.9	-9.3	-8.5	-5.8	-3	-13.6	-4.3	6.4	-5.7	-3.5

Source: Forecast produced using Laurence H. Meyer and Associates' model of the U.S. economy.
Assumptions and simulations by Dr. John Tuccillo, Dr Frederick Flick, and Sean Burns.

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